



AF/18  
1600  
Docket No. ORT-1316

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : KAFRISSEN et al.  
Serial No. : 09/677,976  
Filed : 10/02/2000  
Title : PHARMACEUTICAL METHODS OF DELIVERING FOLIC ACID  
Art Unit : 1616  
Examiner : DeWitty, R.

RECEIVED  
NOV 01 2002  
TECH CENTER 1600/2900

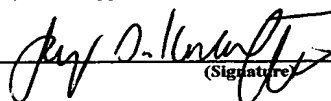
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box AF, Commissioner for Patents, , Washington, D.C. 20231 on

October 24, 2002

(Date of Deposit)

Joseph S. Kentoffio

(Name of applicant, assignee, or Registered Representative)

  
(Signature)

October 24, 2001

(Date of Signature)

Box AF  
Commissioner For Patents  
Washington, D.C. 20231

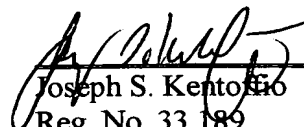
APPEAL BRIEF TRANSMITTAL

Dear Sir:

Enclosed is appellants' Appeal Brief for the above-referenced patent application.

Please charge Deposit Account No. 10-0750/ORT-1316/JSK in the name of Johnson & Johnson for the cost of filing this Brief. Three copies of this Transmittal and appellants' Appeal Brief are enclosed.

Respectfully submitted,

  
Joseph S. Kentoffio  
Reg. No. 33,189  
Attorney for Applicant(s)

Johnson & Johnson  
One Johnson & Johnson Plaza  
New Brunswick, NJ 08933-7003  
(732) 524-3711  
DATE: October 24, 2002



#12  
n.m.  
11/4/02  
Docket No. ORT-1316

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : KAFRISSEN et al.  
Serial No. : 09/677,976  
Filed : 10/02/2000  
Title : PHARMACEUTICAL METHODS OF DELIVERING FOLIC ACID  
Art Unit : 1616  
Examiner : DeWitty, R.

I hereby certify that this correspondence is being deposited with the  
United States Postal Service as first class mail in an envelope addressed  
to: Commissioner for Patents, , Washington, D.C. 20231 on

October 24, 2002

(Date of Deposit)

Joseph S. Kentoffio

(Name of applicant, assignee, or Registered Representative)

  
(Signature)

October 24, 2001

(Date of Signature)

ATTENTION: BOARD OF PATENT APPEALS AND INTERFERENCES

**APPELLANTS' BRIEF 37 C.F.R. § 1.192**

Dear Sir:

This is an appeal from the Final Rejection of May 21, 2002, a Notice of Appeal having been received by the USPTO on August 27, 2002. Appellants' Brief is being submitted on October 24, 2002.

The fees required under 37 C.F.R. § 1.17(f), and any required petition for extension of time for filing this brief and fees therefore, are addressed in the accompanying Transmittal of Appeal Brief.

Pursuant to 37 C.F.R. § 1.192(a), this brief is being filed in triplicate.

10/30/2002 JADD01 00000082 100750 09677976

01 FC:1402 320.00 CH

RECEIVED  
NOV 01 2002  
TECH CENTER 1600/2000

Serial No. 09/677,976

#### REAL PARTY IN INTEREST

The real party in interest of the above-referenced patent application is Ortho-McNeil Pharmaceutical, Inc., having a principal place of business at U.S. Route 202, Raritan, NJ, 08869.

#### APPEALS AND INTERFERENCES

There are no related appeals or interferences pending.

#### STATUS OF CLAIMS

Claims 21-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mortimer (GB 2,131,292), further in view of Tepic et al. (U.S. Pat. No. 5,851,985).

#### STATUS OF AMENDMENTS

The claims stand amended as set forth in the Response To Office Action filed on January 31, 2002.

#### SUMMARY OF THE INVENTION

The invention relates to a method for administering folic acid to subjects afflicted with, or who are at an increased risk of becoming afflicted with, a folic-acid treatable disorder. More specifically, the invention is directed to the administration of folic acid to a subject for whom oral contraception is indicated and who is from a population whose members are afflicted with or are predisposed to become afflicted with cervical dysplasia or cervical carcinoma at a higher than normal incidence than the general population of subjects taking oral contraceptives.

According to the invention, folic acid is administered via a pharmaceutical composition that also includes an oral contraceptive. The folic acid is combined with the oral contraceptive in an amount sufficient to treat or prevent the enumerated disorders in the defined subject group where these disorders result from folic acid deficiency and are treatable or preventable by administering sufficient folic acid to prevent such deficiency. Since oral contraceptives are typically administered chronically over regular and extended intervals, the method taught by the invention provides for sustained

Serial No. 09/677,976

administration of folic acid at dosage levels sufficient to maintain normal bodily stores and to ensure that sufficient folic acid is available in cases of increased bodily folic acid requirements.

#### STATEMENT OF ISSUES

Whether claims 21-23 are unpatentable over Mortimer (GB 2,131,292), further in view of Tepic et al. (U.S. Pat. No. 5,851,985).

#### GROUPING OF CLAIMS

For the purposes of this Appeal, all of the pending claims 21-23 stand or fall together.

#### ARGUMENT

Claims 21-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mortimer, further in view of Tepic et al. Appellants request that this rejection be overturned since the claimed method would not be obvious to a person skilled in the art based on the combined teachings of these references.

Mortimer is primarily concerned with a method for treating or preventing hair loss in men. To this end, Mortimer teaches the use of progestin formulations, in particular medroxyprogesterone acetate, together with vitamin and mineral supplements to treat or prevent male pattern baldness. Mortimer notes that progestins cause desquamation of superficial cells of the vaginal mucosa, inhibit ferning of the cervical mucosa and induce withdrawal bleeds in oestrogen primed women. Mortimer also observes that many individuals for whom progestin therapy is appropriate also benefit from treatment with folic acid. According to Mortimer, this is the case because such individuals often have poor diets due to depression because of their general medical condition and because such patients are often in need of new tissue growth or better fertility.

Mortimer nowhere teaches or even suggests a method of administering folic acid to the subject population to treat or prevent cervical dysplasia or cervical carcinoma. Nor does Mortimer demonstrate any appreciation of the clinical advantages provided by the chronic administration of a composition that combines both an appropriate amount of folic acid and

an oral contraceptive in a single dosage. More specifically, Mortimer nowhere teaches or suggests that the subject population, i.e., those women taking oral contraceptives and who are also at an increase risk of being afflicted with cervical dysplasia or cervical carcinoma, must maintain adequate bodily stores of folic acid and that this need can be met by administering folic acid in a contraceptive that is typically taken chronically over extended periods.

As for US Patent No. 5,851,985 to Tepic et al., this reference relates to a method of treating tumors by arginine deprivation. According to Tepic, tumor cells are destroyed by depriving the cells of the essential amino acid arginine, thereby inhibiting protein synthesis. This is accomplished by dialyzing the blood of a patient to remove arginine from the blood for a time sufficient to cause tumor cells to die. According to Tepic, the effectiveness of the treatment is due entirely to the removal of arginine from the blood by means of an extracorporeal exchange between the blood and a dialyzing fluid across a molecular sieve membrane. Tepic supplements the dialyzing fluid with a number of water-soluble vitamins, major inorganic salts, folic acid and biotin. These components of the dialysis fluid are not active in inhibiting protein synthesis in tumor cells but are added to the dialyzing solution to insure that proper blood levels of these components are maintained during and after the dialysis treatment. No fair reading of Tepic provides any suggestion that folic acid is effective in killing cervical carcinoma cells, and Tepic certainly makes no suggestion regarding a method of administering folic acid in a single dosage with an oral contraceptive to treat cervical carcinoma or cervical dysplasia.

Accordingly, a person skilled in the art would have no motivation to combine the teachings of Mortimer and Tepic in the manner suggested by the Examiner because such a combination would, at best, suggest a method of simultaneously administering a progestin and depriving arginine for the treatment of cervical carcinoma. The Examiner attempts to create the necessary motivation by using applicants' own teachings as a roadmap to pick and choose among isolated disclosures in the applied references. Such hindsight reconstruction of the invention is clearly impermissible. In re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988), on remand, 13 USPQ2d 1192 (D. Conn. 1989). The Examiner compounds the error of relying on hindsight reconstruction by citing a combination of references that, as just noted, teaches away from the invention. A combination of references that leads one skilled

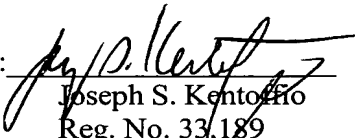
Serial No. 09/677,976

in the art in a direction divergent from that taught by the claimed invention cannot provide proper basis for a rejection under § 103(a). In re Gurley, 31 USPQ2d. 1130 (Fed. Cir. 1994).

In view of the foregoing, appellants request that the Examiner's Final Rejection of claims 21-23 be overturned and that this application be passed to allowance at the earliest possible date.

Please charge the fee of \$320.00 required under 37 C.F.R § 1.17(c), any deficiency in this fee and any other fees that may be required in connection with the filing of appellants' Appeal Brief to Deposit Account No. 10-0750/ORT-1316/JSK.

Respectfully submitted,

By:   
Joseph S. Kentoffio  
Reg. No. 33,189

Johnson & Johnson  
One Johnson & Johnson Plaza  
New Brunswick, NJ 08933-7003  
(732) 524-3711  
Dated: October 24, 2002

**APPENDIX OF CLAIMS**

21. A method of administering folic acid to a subject for whom an oral contraceptive is indicated for preventing pregnancy, which comprises administering to the subject a pharmaceutical composition, wherein
  - (a) the pharmaceutical composition comprises an oral contraceptive for preventing pregnancy in a subject, and folic acid in an amount sufficient to treat or prevent cervical dysplasia or cervical carcinoma which (i) afflicts subjects for whom the oral contraceptive is indicated at a higher-than-normal incidence, (ii) results from folic acid deficiency, and (iii) is treatable or preventable by folic acid administration, and
  - (b) the subject is from a population whose members are afflicted with, or are predisposed to become afflicted with, cervical dysplasia or cervical carcinoma at a higher than normal incidence, the disorder being treatable or preventable by folic acid administration.
22. The method of claim 21, wherein the composition comprises from about 25  $\mu\text{g}$  to about 1 g of folic acid.
23. The method of claim 22, wherein the composition comprises about 400  $\mu\text{g}$  of folic acid.